TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application No.	10/803,374
Filing Date	March 18, 2006
First Named Inventor	Narayan P. Menon
Art Unit	2661
Examiner Name	Cangialosi
Total Number of Pages in This Submission: 22	Attorney Docket Number: 42P11564C2

ENCLOSURES ***(check all that apply)***

- [x] Fee Transmittal Form
  - [x] Fee Attached
- [ ] Amendment / Reply
  - [ ] After Final
  - [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
  - [ ] PTO/SB/08
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
  - [ ] Basic Filing Fee
  - [ ] Declaration/POA
  - [ ] Response to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
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- [ ] CD, Number of CD(s)
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- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [x] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
- [ ] Proprietary Information
- [ ] Status Letter
- [x] Other Enclosure(s) *(please identify below):*

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Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Gordon R. Lindeen III, Reg. No. 33,192 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	January 25, 2007

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Signature	Debbie Casias	Date	**January 25, 2007**

FEE TRANSMITTAL for FY 2006

Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT	($)	500.00

Complete if Known	
Application Number	10/803,374
Filing Date	March 18, 2006
First Named Inventor	Narayan P. Menon
Examiner Name	Cangialosi
Art Unit	2661
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METHOD OF PAYMENT *(check all that apply)*

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☒ Deposit Account Deposit Account Number: 02-2666 Deposit Account Name: Blakely, Sokoloff, Taylor & Zafman LLP

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FEE CALCULATION

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1403	1,000	2403	500	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
1809	790	1809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	

Other fee (specify) _____

SUBTOTAL (2) ($) 500.00

SUBMITTED BY Complete (if applicable)

Name (Print/Type)	Gordon R. Lindeen III	Registration No. (Attorney/Agent)	33,192	Telephone	(303) 740-1980
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Based on PTO/SB/17 (12-04) as modified by Blakely, Sokoloff, Taylor & Zafman (wlr) 12/15/2004.
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Our Docket No.: 42390P11564C2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	)	
	)	
Narayan P. Menon	)	Examiner: Backer, Firmin
	)	
Application No.: 10/803,374	)	Art Group: 3621
	)	
Filed: March 18, 2004	)	
	)	
For: Wireless Access Unit with Trunk Interface	)	
	)	

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Alexandria, VA 22313-1450

APPEAL BRIEF
IN SUPPORT OF APPELLANT'S APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Sir:

Applicant (hereinafter "Appellant") hereby submits this Appeal Brief (hereinafter "Brief") in support of its appeal from a final decision by the Examiner, August 25, 2006, in the above-referenced Application. Appellant respectfully requests consideration of this appeal by the Board of Patent Appeals and Interferences (hereinafter "Board") for allowance of the above-captioned patent application.

An oral hearing is not desired.

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TABLE OF CONTENTS

I.	REAL PARTY IN INTEREST	3
II.	RELATED APPEALS AND INTERFERENCES	3
III.	STATUS OF CLAIMS	3
IV.	STATUS OF AMENDMENTS	3
V.	SUMMARY OF CLAIMED SUBJECT MATTER	4
VI.	GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	6
VII.	ARGUMENT	7
VIII.	CONCLUSION	10
IX.	APPENDIX OF CLAIMS	i
X.	EVIDENCE APPENDIX	viii
XI.	RELATED PROCEEDINGS APPENDIX	viii

I. REAL PARTY IN INTEREST

The invention is assigned to Intel Corporation of 2200 Mission College Boulevard, Santa Clara, California 95052.

II. RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal that will directly affect, be directly affected by, or have a bearing on the Board's decision.

III. STATUS OF THE CLAIMS

Claims 1-26 are currently pending in the above-referenced application. No claims have been allowed. All pending claims were rejected in the Final Office Action mailed August 25, 2006, and are the subject of this appeal.

All pending claims stand rejected under 35 U.S.C. § 102(e).

IV. STATUS OF AMENDMENTS

In response to the Final Office Action mailed on August 25, 2006, rejecting claims 1-26, Appellant timely filed a Notice of Appeal on November 27, 2006.

A copy of all claims on appeal is attached hereto as Appendix A.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 1 refers to an apparatus with the following elements:

a trunk interface unit 104 having a plurality of subscriber ports (*See page 14, lines 9-15*), each port being coupled to a trunk of a central telephone switch 105 (*See page11, lines 3-9*);

a plurality of subscriber line interface cards 205, each coupled to a subscriber port 203 to provide loop interface functions to the central telephone switch 105 (*See page 19, line 9 to page 20, line 6*);

a subscriber interface module 208 associated with each subscriber line interface card 17 (*See page 20, line 2 to page 21, line 10*);

a radio transceiver 240 to communicate with a wireless cellular communications network 109 using a wireless trunk 108 (*See page 22, line 20 to page 23 line 7*);

a control section 220 coupled to each subscriber line interface card 205, to each of the subscriber interface modules 208, and to the radio transceiver 240 to receive voice and signaling from each of the subscriber line interface cards to package and format the received voice and signaling for the wireless communications network and, using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network (*See page 22, line 5-22*), and

a wireless access communications unit 201 to route calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch (*See page 23, lines 9-22*).

Claim 12 presents the invention in terms of a method that includes the following operations:

receiving a command from a central telephone switch 105 at a wireless access communication unit 201, the switch being coupled to user stations 102;

routing calls from user stations coupled to the switch alternately to a wireless cellular communications network 109 using a wireless trunk 106, 108 or to a wired

switched telephone network 125 in response to the received command *(See page 12, line 17 to page 14, line 10, see also page 84, line 14 to page 85, line 8 ("8" is the command), see also page 87, line 23, to page 88, line 3, see also page 89, lines 12-18).*

Claim 19 is similar and presents the invention based on the format of *In re Beauregard.* A machine is shown in the elements of Claim 1 and a machine-readable medium may include e.g. SRAM 223, or flash 224. These are described on page 22, lines 5-22.

Claim 23 presents the invention again as an apparatus with the following elements

a central telephone switch 105 coupled to a plurality of user stations 102 (*See page11, lines 3-9*);

a trunk interface unit 104 having a plurality of subscriber ports 203, each port being coupled to a trunk of the central telephone switch (*See page 14, lines 9-15*);

a plurality of subscriber line interface cards 205, each coupled to a subscriber port 203 to provide loop interface functions to the central telephone switch (*See page 19, line 9 to page 20, line 6*);

a subscriber interface module 208 associated with each subscriber line interface card (*See page 20, line 2 to page 21, line 10*);

a radio transceiver 240 to communicate with a wireless cellular communications network 109 using a wireless trunk 108 (*See page 22, line 20 to page 23 line 7*); and

a control section 220 coupled to each subscriber line interface card 205, to each of the subscriber interface modules 208, and to the radio transceiver 240 to receive voice and signaling from each of the subscriber line interface cards to package and format the received voice and signaling for the wireless communications network and, using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network (*See page 22, line 5-22*),

wherein the wireless access communications unit 201 routes calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch (*See page 23, lines 9-22*).

The following paragraphs may be of some help in contextualizing the invention.

" [0006] While PBX and key systems are useful for providing economical coverage within a private local telephone system, for long distance the PBX users or key system users may still be required to rely on a local exchange carrier (LEC) whose landlines are connected to the PBX. The local exchange carrier then routes the call to along distance carrier. Because the user must pay both the local exchange carrier and long distance carrier for each long distance telephone call, long distance telephone service can be quite costly, particularly if the volume of long distance calls is large.

" [0008] There is a need for a communication system having the ability of a PBX or key telephone system to manage local area calls, yet also which can provide access to lower cost, reliable long distance or other network services. There is also a need for a versatile mechanism for allowing PBX or key type systems to achieve relatively inexpensive access to network resources and long distance coverage. There is also a need for a communication system that employs a robust, flexible protocol for providing long distance coverage or other network services to local users of a PBX, key system or other type of local area network."

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-26 stand rejected under 35 U.S.C. §102 (e) as being anticipated by Sicher, et al., U.S. Patent Publication No. 2001/0015968 ("Sicher").

The remaining rejections rely on this rejection. Only this first rejection is to be reviewed.

VII. ARGUMENT

A. Introduction

The Examiner presented a new reference in the Final Rejection appealed from. Appellants responded to that rejection promptly by pointing out that certain elements were not shown. The Examiner's Advisory Action gave no reason for sustaining the rejection, nor did it indicate where the elements were shown. In addition, it did not indicate whether Appellants amendment would be entered for appeal. The amendments were in the nature of corrections and place the claims in better condition for appeal, so Appellants are assuming that these amendments have been entered.

Only Claim 1 is discussed herein in order to simplify this appeal.

B. Sicher cannot anticipate the claims without showing or at least suggesting each and every element in the rejected claims.

The Examiner has rejected claims 1-26 under 35 U.S.C. §102 (e) as being anticipated by Sicher, et al., U.S. Patent Publication No. 2001/0015968 ("Sicher"). Sicher shows a system for interfacing cellular telephones to Voice over IP Internet telephones. Most of the disclosure has to do with converting voice signals from one kind of encoding to another kind of encoding. The Examiner has pointed to paragraphs 16, 17, 29-34, and 39-42.

Sicher paragraphs 29-34 describe Figures 1 and 2 of the reference. There is in Figure 1, a conventional mobile station, radio base station, and mobile switching center. The MSC is coupled to an E-IWF. The E-IWF is coupled through the internet to an Internet terminal. There is almost no explicit description of any of this equipment.

Sicher would appear to leave that description to the state of the art at the time. Figure 2 is a protocol stack. It shows relationships between protocols and encoding schemes.

Referring to Claim 1, it recites, " a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch." Applicants do not see a central telephone switch trunk together with a wireless trunk in the cited section of the reference.

Claim 1 also recites, "a plurality of subscriber line interface cards, each coupled to a subscriber port to provide loop interface functions to the central telephone switch." Applicants do not see subscriber line interface cards in the cited section of the reference.

Claim 1 also recites, "a control section coupled to each subscriber line interface card." Applicants do not see a control section coupled to each subscriber line interface card.

Claim 1 also recites, "using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network." Applicants do not see subscriber interface modules being used to coordinate and control over the air protocols.

Finally there is no suggestion of the last element of Claim 1 that recites, "a wireless access communications unit to route calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch." This last element is also a part of Claims 12, 19, and 23.

Paragraphs 39-42, pointed out by the Examienr, relate to steps c and d of Figure 3, a process diagram. These paragraphs have a lot to say about codecs and other standards and very little to say about routing calls or any type of hardware.

Paragraph 41, pointed out by the Examiner, mentions Network Access Servers and routers providing routing functions but says nothing about their operation or how they function. There is no mention of commands, nor of a central telephone switch.

Paragraphs 16 and 17, pointed out by the Examiner, are in the summary of the invention. Paragraph 16 refers to encoding voice from a mobile station and transmitting it to the cellular base station. From there, it is sent to an E-IWF, converted to VoIP SDUs and sent to an ISP. Paragraph 17, refers to cellular fax protocols. The fax protocols are used by the mobile station to transmit an image. Instead of converting the voice to another type of encoding, the fax data stream is converted into UDP frames to be sent through a fax gateway that then converts the UDP frames into fax modem voiceband information. Again there is no mention of the hardware recited in Claims 1 and 23 nor of the command recited in all of the claims.

Applicants are unable to find any of the teachings referred to by the Examiner in the cited reference. Accordingly, without more, the Examiner has failed to show anticipation by the reference and the claims are therefore allowable. The dependent claims are not discussed above, but are believed to be allowable on the same grounds as the independent claims, as well as for the additional limitations explicitly set forth in each claim, respectively.

VIII. CONCLUSION

Appellant respectfully submits that all appealed claims in this application are patentable and were improperly rejected by the Examiner during prosecution before the United States Patent and Trademark Office. Appellant respectfully requests that the Board of Patent Appeals and Interferences overrule the Examiner and direct allowance of the rejected claims.

This Brief is submitted with a check for $500.00 to cover the appeal fee for one other than a small entity as specified in 37 C.F.R. §1.17(c). Please charge any shortages and credit any overpayments to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: January 25, 2007

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IX. APPENDIX OF CLAIMS (37 C.F.R. § 41.37(c)(1)(viii))

1. An apparatus comprising:

a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of a central telephone switch

a plurality of subscriber line interface cards, each coupled to a subscriber port to provide loop interface functions to the central telephone switch;

a subscriber interface module associated with each subscriber line interface card;

a radio transceiver to communicate with a wireless cellular communications network using a wireless trunk;

a control section coupled to each subscriber line interface card, to each of the subscriber interface modules, and to the radio transceiver to receive voice and signaling from each of the subscriber line interface cards to package and format the received voice and signaling for the wireless communications network and, using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network, and

a wireless access communications unit to route calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch. .

2. The apparatus of Claim 1, wherein the trunk interface couples the wireless access communication unit to the central telephone switch using a wired trunk.

3. The apparatus of Claim 1, wherein the command received from the central telephone switch is based on a dialed number for the call received from the user station.

4. The apparatus of Claim 1, wherein the control section manages the transfer of data between the subscriber line interface cards and the radio transceiver.

5. The apparatus of Claim 4, wherein the control section is further to convert data received from a user station through a subscriber port to a format suitable for wireless transmission using the radio transceiver.

6. The apparatus of Claim 1, wherein the wireless access communication unit registers each trunk with the wireless cellular communications network so that each trunk appears as a subscriber to the wireless cellular communications network.

7. The apparatus of Claim 1, wherein the wireless access communication unit performs off-hook detection for outgoing calls and supports provision of a dial tone to the central telephone switch.

8. The apparatus of Claim 7, wherein the wireless access communication unit further initiates acquisition of a wireless communication channel on the wireless communications network and detects dialed address digits from a user station and passes the received digits via call control signaling to the wireless communications network.

9. The apparatus of Claim 7, wherein the wireless access communication unit detects off-hook transitions from the switch and initiates call release procedures towards the wireless communications network in response to the detected off-hook transition.

10. The apparatus of Claim 1, wherein the wireless access communication unit further comprises a line manager to handle communication between the wireless access communication unit and the switch including call signaling, dialed digit recognition, and transfer of collected dialed digits.

11. The apparatus of Claim 10, wherein the wireless access communication unit further comprises an over-the-air manager coupled to the line manager to handle communication interface and link management to the base station.

12. A method comprising:

receiving a command from a central telephone switch at a wireless access communication unit, the switch being coupled to user stations;

routing calls from user stations coupled to the switch alternately to a wireless cellular communications network using a wireless trunk or to a wired switched telephone network in response to the received command.

13. The method of Claim 12, wherein receiving the command comprises receiving a dialed number from a user station through the switch.

14. The method of Claim 12, further comprising converting data received at the wireless access unit from a user station through the switch to a format suitable for wireless transmission to the wireless cellular communications network.

15. The method of Claim 12, further comprising registering the wireless trunk between the wireless access communications unit and user stations with the wireless cellular communications network so that wireless trunk appears as a subscriber to the wireless cellular communications network.

16. The method of Claim 12, further comprising at the wireless access communication unit performing off-hook detection for outgoing calls and provisioning of a dial tone to the switch.

17. The method of Claim 16, further comprising at the wireless access communication unit initiating acquisition of a wireless communication channel on the wireless communications network and detecting dialed address digits from a user station and passing the received digits via call control signaling to the wireless communications network.

18. The method of Claim 16, further comprising at the wireless access communication unit detecting off-hook transitions from the switch and initiating call release procedures towards the wireless communications network in response to the detected off-hook transition.

19. A machine-readable medium having stored thereon data representing instructions which, when executed by a machine, cause the machine to perform operations comprising:

receiving a command from a central telephone switch at a wireless access communication unit, the switch being coupled to user stations;

routing calls from user stations coupled to the switch alternately to a wireless cellular communications network using a wireless trunk or to a wired switched telephone network in response to the received command.

20. The medium of Claim 19, wherein receiving the command comprises receiving a dialed number from a user station through the switch.

21. The medium of Claim 19, further comprising instructions which, when executed by the machine, cause the machine to perform further operations comprising converting data received at the wireless access unit from a user station through the switch to a format suitable for wireless transmission to the wireless cellular communications network.

22. The medium of Claim 19, further comprising instructions which, when executed by the machine, cause the machine to perform further operations comprising performing off-hook detection for outgoing calls and provisioning of a dial tone to the switch.

23. An apparatus comprising:

a central telephone switch coupled to a plurality of user stations;

a trunk interface unit having a plurality of subscriber ports, each port being coupled to a trunk of the central telephone switch;

a plurality of subscriber line interface cards, each coupled to a subscriber port to provide loop interface functions to the central telephone switch;

a subscriber interface module associated with each subscriber line interface card;

a radio transceiver to communicate with a wireless cellular communications network using a wireless trunk; and

a control section coupled to each subscriber line interface card, to each of the subscriber interface modules, and to the radio transceiver to receive voice and signaling from each of the subscriber line interface cards to package and format the received voice and signaling for the wireless communications network and, using the subscriber interface modules, to coordinate and control over the air protocols of the wireless communications network,

wherein the wireless access communications unit routes calls from user stations coupled to the central telephone switch to the wireless cellular communications network in response to a command received from the central telephone switch. .

24. The apparatus of Claim 23, wherein the central telephone switch is configured to route a call alternately to the wired switched telephone network or the wireless access communication unit in response to a dialed number for the call received from the user station.

25. The apparatus of Claim 23, wherein the central telephone switch comprises a private branch exchange.

26. The apparatus of Claim 23, wherein the control section manages the transfer of data between the subscriber line interface cards and the radio transceiver.

X. EVIDENCE APPENDIX

None.

XI. RELATED PROCEEDINGS APPENDIX

None.